



Is a hemiscrotectomy after primary transscrotal approach in patients with paratesticular rhabdomyosarcoma necessary?

Results from the „Cooperative Weichteilsarkom Studiengruppe“ trials CWS-86, -91, -96, and -2002P

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Paratesticular rhabdomyosarcoma

- 7% of all RMS
- 12% of all pediatric scrotal tumors
- Mesenchymal origin
- Favorable prognosis
- Better outcome in RMA patients



Paratesticular rhabdomyosarcoma

Treatment guidelines

- Multidisciplinary treatment
- Radical, inguinal orchiectomy with high dissection of the spermatic cord
- Transscrotal approach inappropriate
- Primary re-excision with hemiscrotectomy



Hemiscrotectomy

Indications

- Scrotal contamination (biopsy / resection)
- Scrotal invasion
- Palpable residual disease
- Soft tissue margins



Aim

To analyze the necessity of hemiscrotectomy in patients with paratesticular RMS treated within the CWS trials

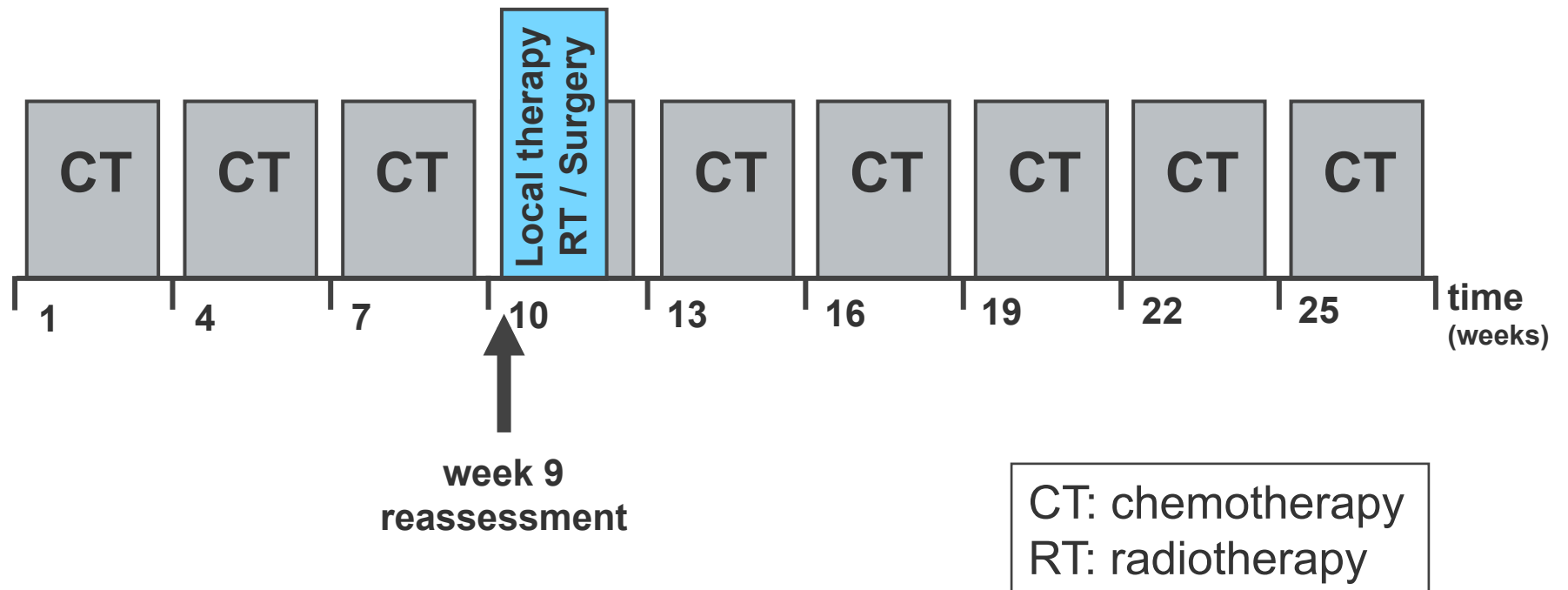


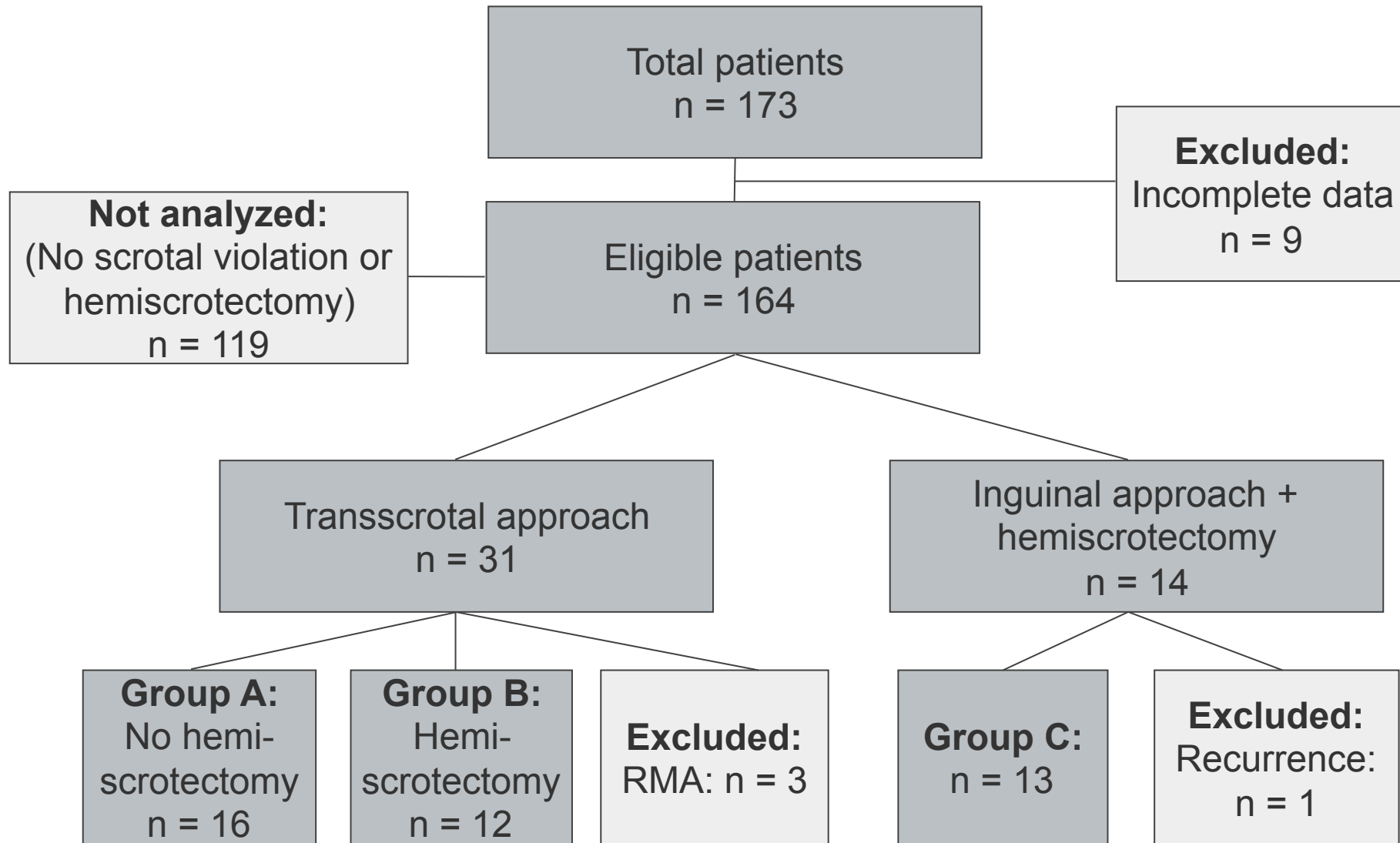
CWS-86, -91, -96, and -2002P trials

- Soft tissue sarcoma (Germany, Austria, Poland, Switzerland, Sweden)
 - Study period: 1986-2008
 - More than 3500 patients with RMS
 - Paratesticular RMS: $n = 173$
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CWS-trials







Patients' data

- **Median age:** 6.54 years [range: 0-17 years]
 - **Median follow up:** 68.3 months \pm 36.6
 - **5-year-OS:** 92.5% \pm 4.2
 - **5-year-EFS:** 90.2% \pm 4.6
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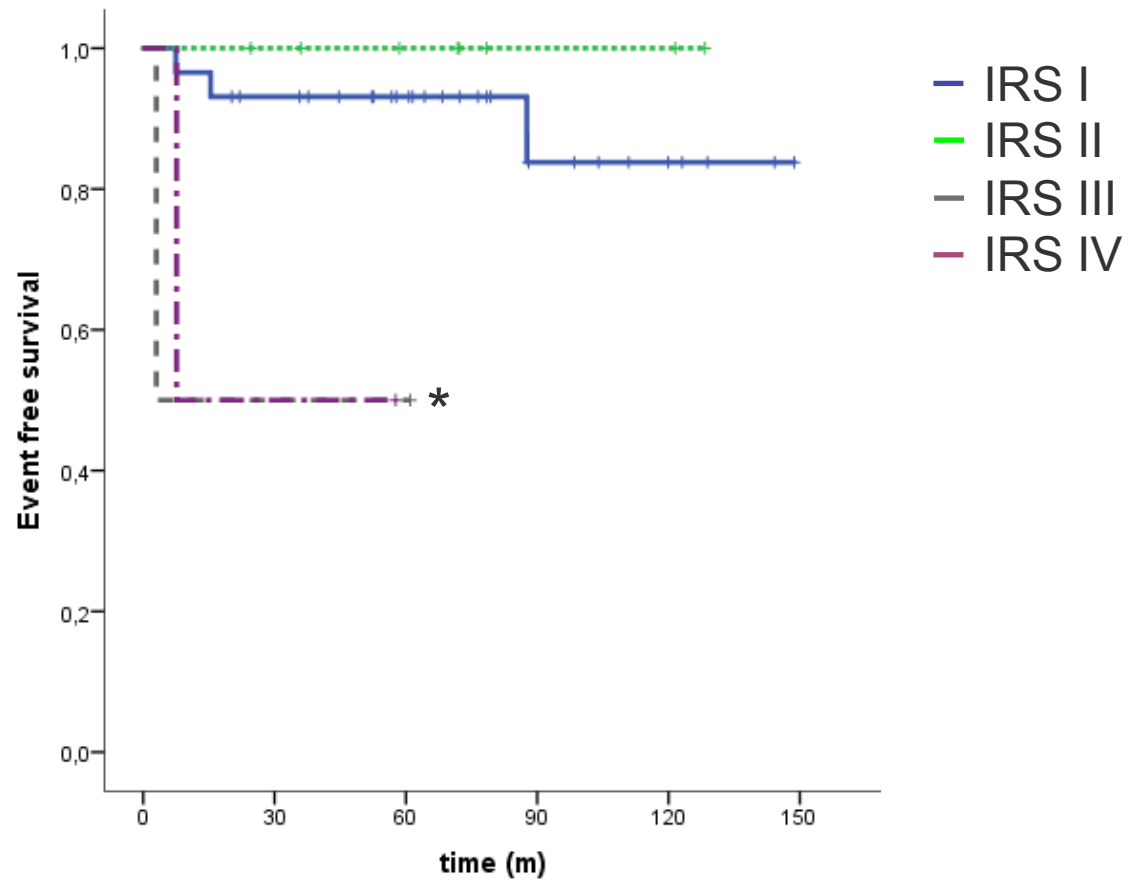


Patients' data

	Group A (n = 16) : Transscrotal without hemiscrotectomy	Group B (n = 12): Transscrotal with hemiscrotectomy	Group C (n = 13): Inguinal with hemiscrotectomy
Median age (y)	5.97 ± 4.79	7.47 ± 5.5	9.69 ± 6
Median follow-up (m)	59.7 ± 37.5	71.8 ± 29.5	72.2 ± 41.3
Initial lymph node involvement (n)			
Yes	0	0	3
No	16	12	10
Locoregional relapse	0	1	2
Metastatic relapse	1	2	0
Outcome (n)			
Alive disease free	15	11	12
Death	1	1	1



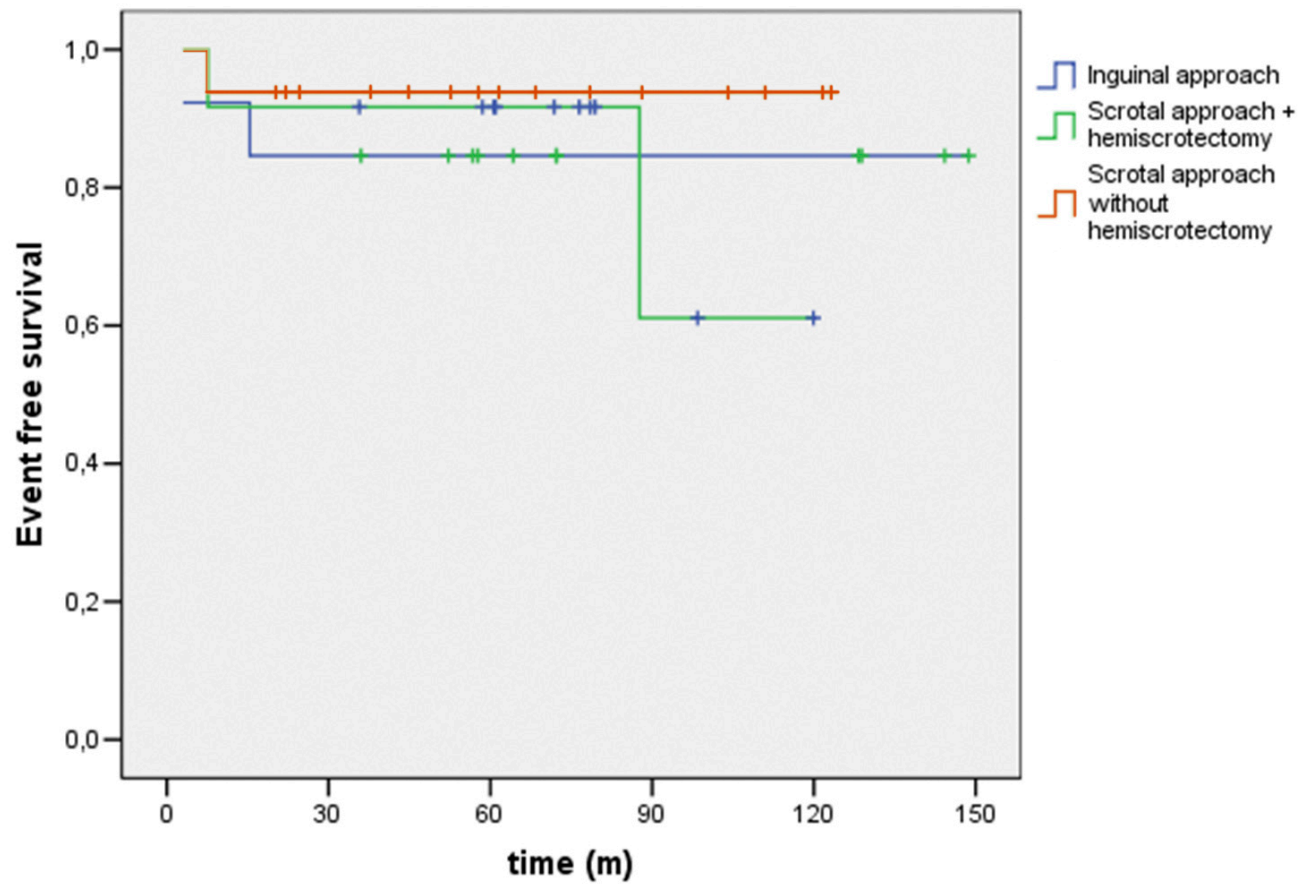
Outcome based on IRS groups



*: $p = 0.011$



Outcome based on treatment group



*:p = 0.662



Surgery (transscrotal approach; n = 28)

Treatment group	Primary surgery	Patients (n)	Secondary surgery	5-y-EFS (%)
Group A: Transscrotal without hemiscrotectomy	Semicastration	9	6/7 secondary semicastration	93.8±6.1
	Incomplete resection	6		88.9±10.5
	Biopsy	1		100
Group B: Transscrotal with hemiscrotectomy	Semicastration	2	12/12 secondary semicastration + hemiscrotectomy	91.7±8
	Incomplete resection	6		100
	Biopsy	4		100
				75±21.7



Surgery (inguinal approach; n = 13)

Treatment group	Primary surgery	Patients (n)	Secondary surgery	5-y-EFS (%)
Group C: Inguinal approach with hemiscrotectomy	Semicastration	4	All incompletely resected and biopsy patients underwent semicastration	84.6±10
	Incomplete resection	4		50±25*
	Biopsy	5		100
			Hemiscrotectomy in all patients	100

*: p = 0.03



Conclusion

- Excellent outcome
 - No impact of surgical approach
 - Complete tumor resection
 - Inguinal approach
 - Scrotal violations: No hemiscrotectomy
 - Tumor infiltration ?
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